**I. Describes the hardware and software components which enable internet and web services and those chosen for creating your website.**

**Hardware and software components for Internet and Web services**

The main hardware components that enable internet and web services include modems, routers, servers, network cards, switches and DNS servers. The essential software components which enable internet and web services are operating systems, web browsers and http/https internet protocols. For creating my website I used HTML5, CSS3 and JavaScript built in Visual Studio Code.

**HTML** was used to arrange and display the content on the site, it handled the layout of the page, the positioning of the content and even the text content itself.

**CSS** allowed me to create a single theme/styling/fonts for the whole website and keep it consistent throughout by editing a single “source of truth” in the style.css, which controls how each page looks to the user and provides the ability to change the general appearance of the whole website by editing a single file. Finally, CSS3 offers some very powerful animation techniques by changing the CSS used on a mouse-over event, giving the appearance of an ever changing website.

**JavaScript** enabled all of the more complicated interactive features including the object-orientated cart system, the persistent local-storage for the shopping cart and updating the cart status without having to reload the page via dynamic DOM rendering.

**II. Outlines the difference between Web 1.0, 2.0, and 3.0 and the differences in website technologies across the three periods.**

**Web 1.0, 2.0, and 3.0 differences and website technologies**

Web 1.0 consisted of simple, static HTML webpages with little user interaction, mainly serving as online brochures or pamphlets. Web 2.0 introduced dynamic, interactives sites using technologies like JavaScript, AJAX, and databases to enable user content, proto-social media content, and collaboration via user generated content. Web 3.0 builds on these features with decentralised data, semantic web technologies, AI, blockchain integration, and enables smarter, more agile and more user-owned experiences.

**III. Details the difference between responsive and non-responsive web design.**

**Responsive vs. Non-responsive Web design**

Responsive design lets websites adapt layout and content to fit any device screen resolution e.g. desktop, tablet, mobile, improving usability and access. In some instances, it actually enables the website to serve distinctive versions of the webpage to the user based on a mobile device vs. a desktop experience, using the different technologies specific or tailored to suit the user’s needs. Non-responsive design means websites maintain only one fixed layout, often having poor readability or straight up unusable features on diferent screen resolutions or with different interfaces e.g. mouse & keyboard vs. touch-screen. Modern web standards and frameworks prioritise responsive techniques for all user experiences ensure a website is appreciate regardless of the device a user employs.